Section III
Finance
Baseline, Interventions & Management Reporting

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Summary of Recommendations

- Develop a Daily Flash Report that reflects key performance indicators.
- Implement a rolling budget – utilizing a side-by-side rolling budget format.
- Distribute (or make accessible online) the Budget and Financial Monitoring reports within 10 calendar days of the close of a period.
- Design and implement customized reporting capabilities, reducing the manipulation required on a department-by-department basis. Assign a design team the six-month task of developing reporting tools for VPs and senior managers.
- Allocate Decision Support resources to address strategic planning and service line analysis on a timely basis.

Baseline: Assumptions and Gap Analysis

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Gap Analysis – Overview

- Project performance from a current baseline forward through three years:
  - Utilize budgets, forecasts, financial statements and interviews.
  - Key assumptions are identified and challenged.
- Establish an operating margin:
  - Sufficient to fund capital spending.
  - Comparable to similar organizations.
  - Support liquidity and investment objectives of the system.
- Estimate the gap by identifying the difference between current/baseline performance and the desired operating margin.
- Identify opportunities with specific deliverable results to be achieved by management, including:
  - Initiatives by UNCH identified in FY04, but not yet fully implemented as of FY05.
  - Volume increases from improved patient throughput, enhancement of existing services and development of new services.
  - Improvements in bed designation and allocation, particularly with respect to observation bed assignments and conversions.
  - Reduction in expenses for Contracted Services & Purchased Services, specifically Funds Flow.
  - Reduction in labor expenses.
  - Reduction in non-labor expenses, including supplies, pharmacy costs, contracted services.
  - Improved cash flow from accelerated collections, enhancements to revenue cycle processes and reductions in bad debt, write-offs, adjustments and charity care.
  - Revenue improvements from managed care contract negotiations.

Gap Analysis – Overview

- Create baseline model for UNC Hospitals only – it was determined that an accurate baseline could not be developed for UNC Physicians and Associates (UNC P&A) due to multiple sources and uses of departmental funds, including monies flowing through the University.
- Identify financial impact of opportunities against the gap.
- Structure opportunities into an implementation plan:
  - Identify opportunities for implementation.
  - Prioritize opportunities.
  - Identify realistic timeframes and management responsibility.
- Senior management team initiatives:
  - Identify and manage implementation risk.
  - Develop a financial realization schedule.
  - Establish tracking and monitoring of implementation plan and financial results.

Key Terms

- **Adjusted Discharges** – Total patient discharges (excluding newborns) times Outpatient Adjustment Factor. Discharge and admission numbers are interchangeable based on which reports are available from UNC HCS.
- **Adjusted Occupied Bed** – {Total patient days (excluding newborns) divided by days in period} times the Outpatient Adjustment Factor.
- **Adjusted Occupied Bed, CMI Weighted** – Adjusted occupied beds divided by case mix index.
- **Baseline Financial Projections** – Information using historical three year data and current trends with management and NCI assumptions.
- **Case Mix Index** – Measurement of patient acuity (inpatient statistic only).
- **Case Mix Adjustment** – Standardization of revenue and expenses based upon acuity of patient care.
- **FTEs/AOB** – Full-time paid employees plus contracted employees plus allocation of corporate employees, minus housestaff, divided by adjusted occupied beds.
- **FTEs/AOB, CMI Weighted** – FTES/AOB divided by case mix index – normalizes staffing comparisons based on acuity of patient load.
- **Outpatient Adjustment Factor** – Standardization of inpatient charges allowing upward adjustment of inpatient statistics for the relative value of outpatient activity.
- **Paid Hours** – Assumes an equivalent FTE is paid annually for 2,080 hours.

Summary of Key Baseline Assumptions

- The baseline financial projections were developed to provide a starting point for the calculation of improved financial performance as a consequence of revenue enhancement, productivity improvements and/or expense reductions.
- The basis for the assumptions are UNC HCS historical financials and trends, UNCH's budget as submitted to the State of North Carolina and the forecast prepared by the Budget Department using the Kaufman-Hall forecasting model.
- Additional assumptions were developed after meetings with Finance Department leadership and certain members of management.
- Navigant experts in key respective disciplines made further recommendations or changes to these assumptions based on prior experience with similar institutions and markets.
- The financial statements presented include a profit and loss (Income Statement) for the UNC Hospitals as well as projected balance sheets.
- Impact of the new Cancer Hospital is omitted from these projections as it is anticipated that this facility will not come "on line" before 2008, even though some capital costs may be incurred.
- Estimates, as projections, are not guarantees of actual performance, but estimates of anticipated performance.

Summary of Revenue and Growth Assumptions Used in Baseline

- Admissions grow slightly, at 1.5% in FY05 and, thereafter, at 1% per year.
- Case mix remains constant at 1.53.
- Length of stay remains constant at 6.57 days.
- Reimbursement rises at 4% in FY05 and 3% per year thereafter, which reflects successful managed care contract negotiations prior to end of FY04.
- Net Patient Revenues rise at nearly 8.5% in FY05, and then at 4.8% per year in future years, contemplating faster growth in outpatient revenues.
- No changes in payer mix.
- Charity increases from 4.0% to 4.1%.
- No change in contractual adjustment rates.
- Other Operating Revenues consistent with FY05 budget – anticipated no events, which would increase or decrease investment returns.
- No additional cost settlements from prior years' unsettled cost reports are anticipated.
- Days in receivables remain constant at 70 days.

[Portions of the Assumptions are confidential and have been redacted.]

Summary of Expense Assumptions Used in Baseline

- Interest Expense is moved “above the line” to be included as an Operating Expense.
- Benefits costs increase each year due to anticipated changes in state pension funding and health insurance premium costs. Benefits rates are 18% in FY05, 20.54% in FY06 and 21.75% in FY07. However, overall benefit rates are not this high because there are salaries for which the benefit rate is lower (i.e., housestaff) or there are no benefits (i.e., contracted personnel).
- One measure of calculating the gap was to hold Paid Hours/CMI Adjusted Discharge at 151.7 – a result of using the actual end-of-year FY04 FTE count (excluding housestaff).
- Bad debt expense grows slightly from 4.1% in FY05 to 4.4% thereafter.
- No additional debt is anticipated.
- Medical malpractice cost growth is 38% in FY05 and projected to grow 15% per year thereafter.
- Supply spending growth is 6.2% per year, except in FY05, for which 2.6% growth is used, reflecting a potential MedAsset savings impact. These projections include supplies and pharmacy products combined.
- Cash flow reflects bond covenant requiring that 7.5% of Gross Revenues be held in Restricted Funds, resulting in pressure on unrestricted cash.
- There are miscellaneous third-party liabilities. It was estimated these would be paid across the next five years, while not increasing the Days in Payables.
- Due to reduction in personnel contract costs in FY04 (some expired at end of FY04), the projected growth in personnel contracts costs is minimal.

[Portions of the Assumptions are confidential and have been redacted.]

Baseline Models and Forecasts – UNCH

The following pages are confidential and have been redacted:

- **Baseline Forecast Income Statement**
- **Operating Margin – Baseline Gap Analysis**
- **Balance Sheet – Based on Baseline Income Statement**
- **Statistics and Ratios**
- **Summary Operating Data**
- **Gap Analysis – Key Balance Sheet Items**

Risks

- Volumes may not materialize.
- Additional capacity, once available, goes unfilled.
- Because Medicaid reimburses UNCH on the basis of costs, the Interventions may not be fully realized, particularly where an Intervention is based on reduction of expenses. However, it is also possible that the gap required to meet the 3% operating margin would be reduced since much of the gap is also driven by expense increases.
- Cost report settlements, which have not been concluded for prior three years, could provide additional settlements in favor of the UNC HCS or reveal liabilities for which UNC HCS could be responsible (i.e., repayments).
- Potential for further reductions in federal support for Medicare programs and graduate medical education.

[Portions of the Risks are confidential and have been redacted.]

Interventions – UNCH

The following pages are confidential and have been redacted:

- **Intervention Tracking Table – UNC Hospitals**
- **Intervention Detail – UNC Hospitals:**

Intervention Impact Analysis – UNCH

The following pages are confidential and have been redacted:

- **Income Statement – Before and After Interventions**
- **Comparative Gap Analysis – Before and After Interventions**
- **Comparative Statistics and Ratios – Before and After Interventions**
- **Comparative Summary Operating Data – Before and After Interventions**
- **Comparative Summary – Key Balance Sheet Items**

Comparative Gap Analysis
Before and After Interventions – Reconciliation

- The Gap required to provide a 3% Operating Margin is calculated before any Interventions are input (the *Baseline Gap*) and again after Interventions are identified (the *Gap after Interventions*).
- In FY07, Net Operating Revenues increase by $25.2M, due to Interventions.
- Therefore, the goal of a 3% Operating Margin would increase by $757,000 ($25.2M times 3%) and require the *Gap after Interventions* to increase by $757,000 from the *Baseline Gap*.
- This explains why the Gap is slightly higher after Interventions than before Interventions.

Financial Reporting

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Financial Reporting

- UNC HCS is a data rich organization with the ability to convert the data into a timely management tool. Hyperion, Lawson and the Administrative Work Station systems (currently being distributed to managers) provide a number of data access and manipulation opportunities for managers.
- While there is a great deal of data available, the Hyperion system is seen as complex, requiring data manipulation and additional analysis by each manager to be useful. Only a few departments or managers have the resources (e.g., an analyst or business person) to help them manipulate the data into formats which enable them to manage more effectively.
- Many managers believe that the reports do not offer a quick analysis of performance and that the statistics focusing on expense do not adjust for changes in revenue or volume. Therefore, expense increases are noted, but are not tempered by volume or revenue fluctuations.
- Some departments are fortunate enough to have an outside system that interfaces with the Hyperion system to provide granular and relevant reporting (e.g., GE System for ORs).
- Usable, consolidated information for managers overseeing multiple departments is not available.
- Most managers distribute the financial reports to their department heads and require explanations of variances.
- The Hyperion system reports utilize a parameter called “Workload Statistic.” For many managers, this basis of analysis is unclear and does not form a usable denominator to reflect workload measurements within the department. The larger and more complex a department is, the less valid the Workload Statistic becomes.
- The Administrative Work Station is perceived to be a program for analysis, but is not yet widely implemented.

Budgeting and Forecasting

- There is a disciplined budgeting process that is perceived to be quite extensive and time consuming.
- The hospital budget and medical school (state) budget are developed on different time lines, frequently requiring modification of assumptions after the budgets have been finalized.
- Managers receive substantial data and input from the Budgeting Department and though there is a constant exchange of information, the numbers are occasionally changed without management sign off.
- UNC HCS utilizes a traditional budget reporting system comparing month-to-date and year-to-date financial performance.
- Reports are finalized within two to three weeks of month end, which, it was noted, is an improvement in timeliness.
- Though some managers believe there is a “flex budget” based on changes throughout the year, none are aware of how the process actually works. There does not appear to be a method to analyze department performance based on changes in business, volume, etc. – a “rolling budget.”
- There is general dissatisfaction with the timeliness and data available for planning and service line analysis. Specifically, managers want more accessible and understandable data from Decision Support. This would include information that analyzes costs and reimbursement (by procedure, business line, etc.)
- Managers are very pleased that they regularly receive key information from the SR VP/CFO about financial and operational performance of UNC HCS. They believe this information is freely shared with them and that understanding the “bigger picture” helps them perform as better managers.

Financial Reporting and Budgeting Recommendations

Recommendation

- Develop a Daily Flash Report that reflects key performance indicators.
  - The Daily Flash Report should provide relevant information required for effective decision making and may include daily statistics and trends related to activities such as:
    - Patient volume (discharges; daily census; ambulatory visits)
    - ED (visits, left without being seen rate; admissions held in excess of two hours)
    - Throughput indicators (admitting delays; patients physically discharged before noon)
    - Ancillary utilization
    - Labor productivity (Payroll Dollars, FTEs, Overtime and Agency Usage; also using FTEs per AOB)
    - Cash collections
  - Management must develop and subsequently modify the Flash Report to provide information most useful to identify key operational and performance trends, manage staff and anticipate institutional needs.
  - The COO should establish the report template, with guidance from the Leadership Group, and should be responsible for distributing the report throughout the organization, no later than 10:00 AM, Monday through Friday.
  - Development of the Flash Report is not dependent on information systems. Data can be gathered manually and forwarded to a central point by phone, if necessary.

Financial Reporting and Budgeting Recommendations

Recommendation

- Implement a rolling budget – utilizing a side-by-side rolling budget format.
  - At the end of each quarter, the CFO should facilitate the process of extending the projection by three months, resulting in having a twelve month projection available at all times.
  - Charge each manager with the responsibility to review their departmental financial performance and make recommendations for a change in the projection for any material changes in performance.
- Distribute (or make accessible online) the Budget and Financial Monitoring reports within 10 calendar days of the close of a period.
- Design and implement customized reporting capabilities, reducing the manipulation required on a department-by-department basis. Assign a design team the six-month task of developing reporting tools for VPs and senior managers.
- Allocate Decision Support resources to address strategic planning and service line analysis on a timely basis.

Responsibility

- SR VP/CFO

Timeframe

- Within three months after FY06 budget is completed: Rolling Budget
- Six months: Customized reporting design team
- By February 1, 2005: Decision Support Resources to be available for FY06 budget processes

Sample – Flash Report

												LABOR AND PRODUCTIVITY			
	DAYS IN A/R	DISCH NOT FINAL BILLED	TOTAL GROSS CHARGES	CASH COLLECTED	DISCHARGES	CENSUS	OBS BEDS	PHYSICAL DISCHARGES BEFORE NOON	ADMITS HELD IN ED > 2 HOURS	OR CASES	ASC CASES PERFORMED IN MAIN ORs	FTE'S	PAYROLL DOLLARS	AGENCY COSTS	OVERTIME DOLLARS
DAY															
12/6/04															
12/7/04															
12/8/04															
12/9/04															
12/10/04															
12/31/04															
TOTAL															
DEC AVG															
TARGET															
I. VARIANCE AGAINST ROLLING AVERAGE FORECAST:															
CM Projection															
CM Rolling Forecast															
% Increase/Dec(-)															
II. VARIANCE AGAINST PRIOR MONTH:															
CM Daily Average															
PM Daily Average															
% Increase/Dec(-)															
III. PRIOR MONTH TRENDED AVERAGES:															
November															
October															
September															
August															
July															
June															
May															
April															
March															
February															
January															

Legend:

CM = Current Month

PM = Prior Month

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Sample – Rolling Budget

"Three Months Make a Trend"

Business Unit Name **Responsibility**	Prev Month 3	Prev Month 2	Prev Month 1	Current Month Act	Current Budget	Future Month 1	Future Month 2	Future Month 3	Current Year Forecast	Current Year Budget
Discharges										
AOB										
Outpatient Visits										
FTEs										
Net Revenue										
Labor Costs										
Resident Costs										
Physician Services										
Supplies										
Purchase Services										
Uncollectible Expense										
Depreciation										
Interest										
Total Expenses										
Operating Income										
Operating Margin										
Non Operating Income										
Gain (Loss)										

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UNC Physicians and Associates (UNC P&A)

The following page is confidential and has been redacted:

- **Intervention Tracking Table – UNC P&A**

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